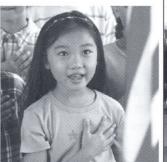


Teacher
and Parent
Perceptions
of the Texas
Assessment
of Knowledge
and Skills











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Executive Summary

Background

Texas has a long history of testing students on their levels of achievement as well as holding students, schools, and districts accountable for student achievement and other student outcomes. Indeed, the federal No Child Left Behind Act, which relies heavily on testing and accountability as levers for improving student achievement across the country, was modeled on the Texas testing and accountability system.

Researchers and policymakers have debated the effects of the Texas system on students and teachers. On one hand, supporters have argued that the system has increased student achievement, decreased dropout rates, decreased the achievement gap between non-White and White students as well as between poor and affluent students, and increased the overall quality of the Texas education system. Critics of the system have contended that the system has narrowed the curriculum, promoted "teaching to the test," increased test scores rather than real learning, increased dropout rates, failed to close the achievement gap, and not provided a quality education for every child in the state.

Methodology

In response to these conflicting perceptions, the Association of Texas Professional Educators funded a survey of 500 randomly selected teachers and 500 randomly selected parents to garner the perceptions of these stakeholders about their concerns related to the Texas education system, their views of the Texas Assessment of Knowledge and Skills (TAKS), and their suggestions, if any, for changing the TAKS system. The survey was conducted by Creative Consumer Research (CCR) of Houston. Prior to developing the questionnaire, CCR conducted focus groups of parents and teachers in urban, suburban and rural districts around the state. More than 90% of the teachers surveyed taught at least one grade level in which TAKS is used or will be used to determine either student promotion or graduation (Grades 3, 5, 8, and 11). The survey participants closely approximated the overall Texas teacher population as well as the Texas public school parent population.

Overall Findings

In general, both teachers and parents held fairly negative views about the TAKS. However, the results suggest that many teachers and parents have mixed feelings about the TAKS, thus reflecting their perceptions that the TAKS has both positive and negative impacts on students, teachers, and the quality of education in Texas.

Importantly, the results suggested that neither teachers nor parents want to return to the days of no assessment or accountability. Indeed, both teachers and parents suggested that the system has simply swung too far from one extreme (no testing or accountability) to another (too much testing and accountability). Thus, rather than suggesting the elimination of testing and accountability, teachers and parents simply support revising the current system to retain its strengths and improve on its weaknesses in order to create a more effective system. Specifically, more than 45% of teachers and parents suggested replacing the TAKS

with end-of-course exams, while an equal percentage suggested using the TAKS or another test in combination with a student's grade-point average (GPA) to make promotion or graduation decisions. In the sections that follow, I describe some of the most important findings.

Concerns About the Texas Education System

When asked to respond to a set list of possible concerns, the top concern for teachers was the impact of TAKS on the curriculum, whereas the top concern for parents was students' respect for teachers. A majority of both parents and teachers were concerned about the impact of TAKS on the curriculum as well as the importance of TAKS scores on a student's promotion to the next grade or graduation.

The Impact of TAKS on Learning and the Quality of Education

The results suggested that both teachers and parents hold a fairly negative view of the impact of TAKS on learning and the quality of education. The most important findings were the following:

- About 60% of teachers and parents agreed that because of the TAKS, teachers are teaching students to become test takers rather than critical thinkers.
- Less than 10% of teachers and less than 30% of parents agreed that the TAKS accurately assesses a student's academic level.
- Less than 15% of teachers and less than 30% of parents agreed that the TAKS increases the overall quality of our educational system.
- More than 40% of teachers and almost 50% of parents agreed that the TAKS test reduces learning to how well a student can take a test.
- A majority of teachers and a near majority of parents agreed that TAKS-focused instruction limits advanced students.
- About 15% of teachers and 35% of parents agreed that the TAKS raises the state's
 educational standards and allows students to have an education that better prepares
 them for adult life.
- About 15% of teachers and 35% of parents agreed that the TAKS "levels the playing field" for students statewide, regardless of socioeconomic status.

The Impact of TAKS on Students

The results suggested that both teachers and parents hold a fairly negative view of the impact of TAKS on students. The most important findings were the following:

- Close to a majority of teachers and parents agreed that they expected the dropout rate to increase because of the TAKS.
- A majority of teachers and parents agreed that the TAKS test is best suited as a diagnostic tool rather than the deciding factor for students to advance or graduate.
- About 20% of teachers and 40% of parents agreed that the TAKS forces students to take education seriously.

The Impact of TAKS on the Curriculum

The results suggested that both teachers and parents believe that the TAKS has a negative effect on the curriculum.

- More than 65% of teachers and parents agreed that the TAKS forces teachers to discard topics that they had planned to cover in order to prepare for the TAKS.
- About 40% of teachers agreed that teaching the TEKS is adequate for preparing students to pass the TAKS.

The Impact of TAKS on Teachers and Teaching

Again, both teachers and parents tended to hold negative views toward the effect of TAKS on teachers and teaching:

- Only 5% of teachers and about 15% of parents agreed that a teacher's salary should be influenced by TAKS scores.
- About 44% of parents agreed that the TAKS requires teachers to improve their teaching because they are held accountable by their school district.

The Impact of TAKS on Pressure to Perform

Both teachers and parents suggested that the TAKS places teachers and students under pressure and that the pressure is too intense for children, especially those in elementary grades. The most important findings were the following:

- About 60% of teachers agreed that they felt pressure from campus and district administrators to increase test scores, but only 15% agreed that they felt pressure from parents.
- Almost 50% of teachers and parents agreed that the TAKS puts so much pressure on students that it may cause some to cheat or consider cheating.
- About 20% of teachers agreed that the TAKS puts so much pressure on teachers and administrators that it may cause some of them to cheat or consider cheating.
- About 40% of parents agreed that the TAKS had a negative emotional impact on their child or children.

The Impact of TAKS on Other Areas

The most important findings in other areas were the following:

- About 15% of teachers and 35% of parents agreed that the average parent can easily understand what the TAKS scores mean.
- A majority of parents agreed that the TAKS should be administered at the beginning of the school year and used only as a diagnostic tool.

ATPE Recommendations for Assessment and Accountability Revisions

In focus groups, surveys and questionnaires directed at Texas educators and parents over the last few years, one concern has consistently surfaced: the overemphasis on high-stakes assessment and accountability based on the Texas Assessment of Knowledge and Skills (TAKS) is not preparing our students for successful adult lives in the global economy.

The system has forced some positive changes related to the identification of educational deficiencies in demographic subgroups and to changes in school district behavior. However, parent and educator input indicates that keeping Texas at the forefront of education reform as well as meeting individual student and family needs will require some retooling of the system. Two cornerstones of a successful reformation will be substantial increases in school resources (especially a major investment in teacher quality) to meet a standard of excellence instead of adequacy and the incorporation of educators and parents into the design of the system.

In 2006, ATPE funded a survey of 500 teachers and 500 parents to gauge their TAKS-related perceptions and concerns. The recommendations proposed here for the future of assessment and accountability in Texas are based on both the policy implications from the survey as well as countless discussions and forums conducted with and by educators over the last year in anticipation of a full study of the assessment system as required by House Bill 1.

Understanding the distinction between measuring student learning and measuring student performance is critical to understanding educator and parental viewpoints about assessment and accountability. The need for educator involvement in system development and the necessity of commitment to system stability over time were the overarching themes of the input we received from educators.

The survey and forums indicate that:

- Educators and parents want a system that is diagnostic and evaluative and that incorporates growth in student knowledge throughout a student's career.
- Educators and parents would like the system to include multiple indicators of student learning and not just measure student performance on one test.
- Substantial increases in financial investments in education reforms are needed to meet higher standards. In particular, investments are needed in reforms that foster individualized student attention such as access to real-world technology and skills, requiring smaller classes, and investing in teachers instead of relying on "teacherproof" curriculum and testing.

Recommendations for Legislators and Policymakers

Based on Dr. Fuller's analysis and findings from focus groups conducted around the state by Creative Consumer Research, ATPE makes the following recommendations for revisions to the accountability and assessment system:

- 1. Solicit and incorporate the input of educators and parents in the evolution of testing and accountability system designs.
- **2.** Invest in education reforms that will give every student an opportunity to excel beyond the standard of adequacy.
- **3.** Maintain transparency and accountability in a public education system that aims for student success.
- **4.** Enhance the assessment system so that it encompasses multiple indicators of student learning and progressively measures individual student gains in knowledge over the course of a school year.
- **5.** Incorporate both diagnostic and summative testing in the state assessment system while encouraging districts to provide teachers more discretion in the timing and administration of formative assessments such as benchmarks.
- **6.** Revise curriculum standards as necessary to help students acquire deeper understanding of core concepts.
- **7.** Cease the overemphasis on standardized test scores as the basis for high-stakes decisions such as student retention and high school graduation.
- **8.** Caution school districts against relying on student scores on the TAKS or similar instruments as the foundation for teacher pay and benefit determinations. The TAKS and other assessments of its nature were not designed for such use, as presented on pp. 25-26 of this document.
- **9.** Ensure that accountability requirements will facilitate each student's completion of a well-rounded high school education comprising rigorous courses tailored to the student's post-graduation goals.
- 10. Explore the use of computerized testing and other solutions to maximize flexibility in test administration and to facilitate data analysis in order to improve instruction and meet individual student needs.
- **11.** Offer rewards for commendable student achievement, such as automatic college admission.

Success of the System

Accountability system reforms have a much larger chance of success and acceptance if the reform process includes a thorough investigation of the current system and implements changes based on input from stakeholders, parents and teachers from across the state. We suggest that the state require a series of hearings or sessions that allow for such input and that the state actively seek input from educators on each campus in the state through visits and listening sessions.

A successful system that truly prepares our students for the global economy by requiring rigorous standards and accountability must have substantially increased resources. The current school finance system and resources provided are based loosely on a standard of adequacy in education, not a standard of excellence. Rather than placing so much of the financial burden on testing and standardized curriculum to try to "teacher-proof" education, research consistently says the investment most important to making increased standards work is an investment in teacher quality. That means requiring high standards for entrance to the teaching profession and offering compensation that allows education to compete with private industry and higher education for faculty.

The state must reduce teacher turnover rates and increase retention of academically gifted and experienced teachers in all grades, especially at schools with high numbers of struggling students. A diagnostic and evaluative system of assessment and learning requires an enormous investment in not only assessments and exams, but also in the creation of positive working conditions to facilitate diagnosis and remediation. Primarily, this means an investment in technology, smaller classes, teacher training that directly relates to technology and the use of data to evaluate learning, and special programs based on students' individual needs.

Introduction

Texas has a long history of testing students on their achievement, starting in the early 1980s with the Texas Assessment of Basic Skills and continuing to the present with the Texas Assessment of Knowledge and Skills (TAKS), which was first administered in 2003. According to the Texas Education Agency (2005, p. 4), "The primary purpose of the [TAKS] is to provide an accurate measure of student achievement in reading, writing, mathematics, social studies, and science." Students are to be taught the Texas Essential Knowledge and Skills (TEKS), and the TAKS is designed to assess the degree to which students have learned the knowledge and skills. Ideally, the full complement of TEKS objectives is taught to each student, and the TAKS is used to assess how well each student mastered each objective.

One important component of this system is the Texas accountability system, which has rated schools according to their assessment scores and other criteria since 1993. The system was designed such that the scores (and other student outcomes) of African American, Hispanic, White, and economically disadvantaged students are reported and used separately to hold schools and districts accountable. Thus, one subpopulation of students not meeting acceptable standards on one outcome measure could render a school or district Low Performing. The system was intentionally designed this way to place pressure on schools and districts to improve student outcomes for all students.

While some argue that the Texas testing and accountability system has had positive effects on student outcomes, others contend that the system has had negative, unintended consequences, such as a narrowing of the curriculum, a "dumbing down" of the education system in general, and increased dropout rates.

This survey of 500 randomly selected teachers and 500 randomly selected parents was intended to garner the perceptions of the respondents about their concerns related to the Texas education system, their views of the TAKS, and their suggestions, if any, for changing the TAKS system. Each respondent completed a phone survey conducted by Creative Consumer Research and was asked to respond to a series of questions and statements.

Findings

The findings are divided into nine sections:

- A. Concerns About the Texas Education System
- **B.** Suggestions for Changing the Texas Education System
- C. The Impact of TAKS on Learning and the Quality of Education
- **D.** The Impact of TAKS on Students
- **E.** The Impact of TAKS on the Curriculum
- F. The Impact of TAKS on Teachers and Teaching
- G. The Impact of TAKS on Pressure to Perform
- H. The Impact of TAKS on Other Areas
- I. Suggestions for Changing the TAKS

CONCERNS ABOUT THE TEXAS EDUCATION SYSTEM

Both teachers and parents were asked to respond to a series of statements concerning the Texas education system. The respondents were asked to rate their level of concern about each statement by ranking the statement from 1 (not at all concerned) to 10 (highly concerned). Based on an analysis of the distribution of responses, the responses were grouped into four categories: not concerned (1–3), a little concerned (4–5), somewhat concerned (6–7), and very concerned (8–10).

Findings

When asked to respond to a set list of possible concerns, the top concern for teachers was the impact of TAKS on the curriculum, while the top concern for parents was students' respect for teachers. As shown in Table 1 (p. 12), about 61% of both teachers and parents were very concerned about the effect of the TAKS on the curriculum and classroom practices. This was fairly consistent across all subpopulations of teachers and parents. In fact, there were very few statistically significant differences between subgroups. The similarity in the levels of concern across subgroups suggests that this concern cuts across racial/ethnic, income, education, and geographic lines as well as across teachers and parents in different types of districts and in districts with different levels of effectiveness.

At least 50% of teachers and parents also expressed concern about the importance of TAKS scores on a student's promotion to the next grade or graduation. Again, the level of concern was consistent across the various subgroups of teachers and parents. This suggests the concern is not limited to certain types of districts or certain segments of the population but that it is of concern to most teachers and parents.

Parents were also explicitly asked to make comments about the TAKS. The survey responses indicated the TAKS is quite unpopular with both parents and their children, at least as currently administered. About 82% of those providing a comment had some criticism of the TAKS in its current form, with about 15% being supportive of continuing the TAKS as it is currently administered. The remaining 3% of parents made both positive and negative remarks about the TAKS. Three themes emerged from the parents' comments: The TAKS (a) narrows the curriculum, (b) places an undue amount of stress and anxiety on children, and (c) does not seem to be particularly effective in increasing student learning. With respect to narrowing the curriculum, parents stated the following:

"They need to teach kids to be problem solvers and stick with the curriculum and not focus on teaching to pass a test. They need to make learning fun again."

"The students excel so much in many different areas, and the TAKS scores don't show that. It can be very frustrating for the kids."

Importantly, more than 100 respondents cited increased stress, anxiety, nervousness and tremendous pressure on the children. Overall, phrases like "extremely anxious" and "tremendous pressure" appeared repeatedly along with words such as "terrified," "nerve-racking," and "dread." For example, parents stated the following:

"My kids panic. They can't sleep at night before the test or when the test is near. My youngest son gets anxiety attacks."

"My son seems to be stressed out about taking the TAKS test, and he is an A student, yet he still worries about passing to the next grade. The stress from the test makes him feel sick. He gets stomach[aches] and headaches."

There were also numerous comments about the test being a pointless waste of time and a distraction from real learning. A typical comment was the following:

"I swear to God, school starts on the 14th and that's the first thing they start with. That is all they learn. They don't have time to learn anything else."

Finally, about 50% of teachers and 60% of parents were very concerned about student discipline, whereas almost 50% of teachers and about 66% of parents were very concerned about student respect for teachers.

Conclusion/Discussion

A majority of both parents and teachers are concerned about the impact of TAKS on the curriculum as well as about the importance of TAKS scores to a student's promotion to the next grade or graduation. Further, because these results are consistent across subgroups of parents and teachers, these concerns appear to be held by a broad cross section of parents and teachers across Texas. When asked specifically about the TAKS, a clear majority of the parents held negative perceptions about the testing program as currently implemented. Parents believe the TAKS narrows the curriculum (both with respect to reducing the amount of instruction in non-TAKS assessed subject areas as well as eliminating important topics within TAKS-assessed courses), causes an unacceptable

amount of stress for their children (especially at the elementary level), and is generally ineffective in increasing student achievement. These concerns mirror those found in other states with high-stakes testing programs (Abrams, Padulla, & Madaus, 2003).

Table 1Teacher and Parent Levels of Concern About Selected Areas of the Texas Education System

	Teac	her leve	l of conc	ern	Parent level of concern				
Statement	Not at all	A little	Some- what	Very	Not at all	A little	Some- what	Very	
The impact of TAKS on the curriculum	9.1	11.5	18.1	61.4	13.8	13.6	11.6	61.0	
The impact of TAKS on promotion/ graduation decisions	14.9	16.1	14.5	54.5	20.1	17.5	12.4	50.0	
Student discipline	17.1	15.9	17.3	49.8	17.9	10.5	11.5	60.1	
Student respect for teachers	13.9	20.0	17.9	48.2	13.5	11.7	9.3	65.5	
Paperwork	10.0	18.7	16.7	54.6	lifact noit	degog se	ments of it	os airo a modo arcoto	
The support from your superiors	25.2	16.5	14.0	44.3			,		
Parental involvement in children's education	13.2	19.0	14.6	53.1	nac BAK Bod shën n somati	edfges estatuq est T &	col continu ning 3% of ot the TA	miteoqu sonst s ods ess	
Parental support of teachers	14.7	19.5	18.1	47.8	= 7				

SUGGESTIONS FOR CHANGING THE TEXAS EDUCATION SYSTEM

Through an open-ended question, both teachers and parents were asked to provide suggestions about how to change the Texas public education system. The respondents were allowed to provide multiple responses, so the percentages for the responses could sum to greater than 100%.

Teacher Findings

The most frequent response provided by teachers was to change the TAKS in some manner. Indeed, almost 40% of the teachers mentioned TAKS testing as what they would like to change about the education system. The majority of these respondents suggested getting rid of the TAKS, reducing the amount of testing, or diminishing the amount of pressure associated with the test. For example, teachers stated the following:

"[We should] end the dependence on standardized testing ... and get back to instructing the students."

"There should be less testing because it takes away the students' enthusiasm about school and learning."

"[There should be less] pressure that's put on the students about the TAKS test. There is so much pressure it causes problems in the classroom."

After TAKS, the next largest response categories were class size and increased time to teach, teacher pay, and student behavior and motivation.

Parent Findings

About 22% of the parents mentioned standardized testing in some way, with the majority of these parents specifically mentioning TAKS. Of the 22% who mentioned standardized testing or the TAKS, 73% suggested changing the TAKS testing in some manner; the remainder of the respondents suggested simply eliminating the TAKS. Most respondents were rather vague about how they would change the TAKS, but the majority of these respondents wanted to reduce the focus and the pressure of TAKS testing. Indeed, many of the respondents wanted to reduce the emphasis placed on TAKS so that teachers and schools could get back to "properly educating the students."

Some of the typical responses are provided below:

"I don't like the fact that they only teach the test because some kids are graduating from school not knowing a lot of things; they only know [information] from those standardized tests."

"I think they concentrate too much on [the TAKS]. They study [the TAKS] instead of working kids on what they should be doing. That's all they do—work on that the whole year instead of other stuff. Most parents here agree with that."

"The TAKS testing ... has not proven its worth in the education of our children and, if anything, we've moved backwards."

"They need to teach more because they are not teaching enough. They are concentrating on testing rather than teaching other important things."

"The TAKS test ... is killing our kids by making them nervous wrecks."

"Doing away with the TAKS test. I think it takes away from teachers' creativity and students' creativity and is a waste of time and money."

About 20% of the parent respondents did not provide any suggestions. A majority of those responding in this way suggested they were pleased with the education system in their locale.

Other responses that received support from parents were the following:

- Increase the discipline and safety in the schools or change dress codes (10%).
- Improve teacher quality (9%).
- Reduce class or school size (6%).
- Increase funding or lower tax rates (4%).
- Increase teacher pay (3%).
- Reduce the focus on athletics and increase the focus on academics (3%).
- Change the length of the school year (3%).

- Decrease the inequality in how poor and/or minority students are treated (3%).
- Improve the lunches or lunch schedule (2%).
- Provide additional enrichment courses such as fine arts (3%).
- Provide more appropriate services for special needs students (2%).
- Include prayer or religion in schools (2%).
- About 12% of the respondents mentioned some other area of the education system.

Conclusion/Discussion

Again, both teachers and parents seemed rather disenchanted with TAKS as it is currently implemented. Teachers and parents participating in this survey believe the TAKS leads to a narrowing of the curriculum (both in terms of a reduced focus on nontested subject areas and the deletion of important topics from the curriculum in order to focus on TAKS preparation), increased undue stress on students (especially at the elementary level), and general ineffectiveness of the TAKS in increasing student learning. These results are consistent with most other findings of surveys of educators or parents in states with high-stakes testing programs.

However, although some percentage of teachers and parents want simply to get rid of the TAKS, a greater percentage of respondents from both groups want to modify the current testing program to make it more effective and acceptable in their eyes. Teachers suggested reducing the amount of testing, although it is unclear whether they object to the actual administration of the TAKS tests or the administration of the practice tests that often are mandated by school and district administrators. Teachers also suggested that the amount of pressure associated with the tests be reduced.

THE IMPACT OF TAKS ON LEARNING AND THE OUALITY OF EDUCATION

In the Impact of TAKS section of the survey, both teachers and parents were asked how much they agreed or disagreed with selected statements about the impact of the TAKS on learning and the quality of education, using a scale of 1 (disagree completely) to 10 (agree completely). Responses were collapsed into three groups: strongly disagreed (1–3), ambivalent (4–7), and strongly agreed (8–10).

Findings

As shown in Table 2 (p. 17), both teachers and parents generally held negative perceptions about the impact of the TAKS on student learning and the overall quality of education. Although the intended purpose of the TAKS is to provide an accurate assessment of student knowledge and skills (TEA, 2005), 77% of teachers and 57% of parents disagreed or strongly disagreed that the TAKS actually provides an accurate evaluation of a student's academic level. Strikingly, 25% of both teachers and parents completely disagreed with the statement (responded with a ranking of 1 when asked to respond to the statement). Further, less than 10% of teachers and less than 30% of parents strongly agreed with the statement. A greater percentage of parents in low-performing districts (39%), parents earning less than \$30,000 per year (41%), parents with a high school diploma or lower (46%), and Hispanic parents (44%) strongly agreed with the statement than did parents in high-performing districts (22%), parents earning more than \$75,000 per year (19%), parents with at least a college degree (19%), and White parents (17%). However, in no instance did a majority of parents strongly agree with the statement.

A majority of teachers (77%) disagreed or strongly disagreed that the TAKS testing levels the playing field for students statewide. Alternatively, about equal percentages of parents both disagreed and agreed with the following statement: "TAKS testing 'levels the playing field' for students statewide, regardless of socioeconomic status." About 45% of parents earning less than \$30,000 per year, parents with a high school diploma or lower, and Hispanic and African American parents strongly agreed that the TAKS leveled the playing field, whereas only 20% or less of parents earning more than \$75,000 per year, parents with at least a college degree, and White parents strongly agreed with the statement.

Related to this perception, about 63% of teachers and parents agreed or strongly agreed with the following statement: "The

TAKS test reduces learning to how well a student can take a test." About 42% of teachers and 48% of parents strongly agreed with the statement. Not surprisingly, then, about 75% of both teachers and parents agreed that teachers are teaching students to "become test takers rather than critical thinkers." About 32% of teachers and 43% of parents completely agreed with this sentiment (responded with a ranking of 10 when asked to respond to the statement).

Perhaps as a result of this perception, approximately 70% of teachers and 60% of parents agreed or strongly agreed that TAKS-focused instruction limits academically advanced students. In addition, a majority of parents (73%) also perceived that the TAKS limits a teacher's ability to tailor classroom instruction to meet the needs of students.

One argument in favor of testing and accountability systems is that such systems raise the educational standards for students. Teachers, however, do not believe this is true with respect to the TAKS and the Texas accountability system. Indeed, about 68% of teachers and 53% of parents disagreed or strongly disagreed that the "TAKS raises the state's educational standards and allows students to have an education that better prepares them for adult life." Specifically, only 14% of teachers and 34% of parents strongly agreed with the statement. Interestingly, about twice as many teachers in low-performing districts (19.7%) as teachers in high-performing districts strongly agreed (9.6%) with the statement. Although both percentages are quite low, the findings suggest that teachers in low-performing districts perceive a more positive effect of TAKS on educational standards than other teachers.

Finally, only about 23% of teachers and about 42% of parents agreed or strongly agreed that TAKS increases the overall quality of education. Importantly, almost 50% of teachers and 40% of parents strongly disagreed with the statement. In general, these percentages were consistent across subpopulations of teachers and parents. The only exception to this generalization is that a greater percentage of non-White teachers (17.4%) than White teachers (9.5%) strongly agreed with the statement.

Conclusion/Discussion

As shown above, the results suggest that both teachers and parents hold a fairly negative view of the impact of TAKS on

learning and the quality of education. Most importantly, less than 10% of teachers and 30% of parents believe that the TAKS accurately assesses a student's academic level, which is the stated purpose of the TAKS (TEA, 2005). Similar to this finding, a survey of Texas reading teachers found that 50% of teachers disagreed that gains on the Texas Assessment of Academic Skills (TAAS) reflected true increases in student achievement (Hoffmann, Assaf, & Paris, 2001). The questioning of the validity of the TAAS and TAKS by teachers seems justified given the conclusion by Klein, Hamilton, McCaffrey, and Stecher (2000) that the gains on TAAS are not necessarily reflected on other tests such as the National Assessment of Educational Progress (NAEP). Likewise, Fuller and Johnson (2001) found that the dramatic increases on the TAAS reading tests were not reflected in gains on the reading NAEP, especially for African American students. Such results are not particular to Texas. In their study of Florida, B. D. Jones and Egley (2004) found that teachers also strongly questioned the validity of the Florida state assessment.

A majority of parents did agree with the following statement: Standardized testing is useful when diagnosing a problem or trying to determine if a student has learned what their teacher has tried to teach them. However, it is unclear whether teachers thought that such tests were useful in diagnosing problems or determining if a student learned what the teacher taught. Because only 30% of teachers agreed that the TAKS accurately assesses a student's academic level, a likely assumption would be that the parents were responding to the first part of the statement rather than the second part.

In addition, only small percentages of parents believed that the TAKS would raise the quality of the education system in Texas or raise the state's educational standards in a way that would allow

students to have an education that better prepares them for adult life. In no case did the majority of any subgroup of teachers or parents agree that the TAKS would help the state accomplish either one of these goals. Similar results have been found in other states. For example, G. Jones et al. (1999) found that in North Carolina—a state highlighted alongside Texas as having an effective testing and accountability system (Grissmer & Flanagan, 1998)—found that more than 75% of teachers believed that the testing program would not improve the quality of education in their schools. Related to these findings is that a clear majority of teachers disagreed that the TAKS leveled the playing field for students statewide. Parents, however, were split on the issue, with about one-third of parents disagreeing, agreeing, or somewhat disagreeing or agreeing with the statement.

A third trend was that a majority of teachers and parents agreed that teachers are teaching students to become test takers rather than critical thinkers. Clearly, this was not the intent of policymakers when creating the testing and accountability system or when adopting the TAKS. A near majority or majority of teachers or parents also agreed that the TAKS has other negative impacts, such as reducing learning to how well a student takes a test, inhibiting mastery learning, limiting the ability of teachers to tailor instruction to individual students, taking the fun out of learning, and limiting the education of advanced students. B. D. Jones and Egley (2004) in Florida, G. Jones et al. (1999) in North Carolina, and Abrams et al. (2003) found many of these same results in other states with high-stakes testing programs across the country. More specifically, as found in their national survey of teachers, Abrams et al. concluded, "The implementation of high-stakes testing programs has changed teaching in ways that many teachers feel negatively impacts the quality of instruction that students receive" (p. 23).

Table 2The Impact of TAKS on Learning and the Quality of Education

	Teach	ner level	of agree	ment	Parent level of agreement				
Statement	Strongly disagree	Disagree	Agree	Strongly agree	Strongly disagree	Disagree	Agree	Strongly	
The TAKS provides an accurate evaluation of a student's academic level.	48.0	29.1	14.5	8.4	38.4	18.6	13.6	29.4	
TAKS testing "levels the playing field" for students statewide, regardless of socioeconomic status.	56.2	21.0	8.8	14.1	32.5	17.7	16.5	33.3	
The TAKS test reduces learning to how well a student can take a test.	16.5	20.7	20.1	42.8	19.4	17.8	14.8	48.0	
Because of the TAKS, teachers are teaching students to become test takers rather than critical thinkers.	15.0	10.4	14.6	59.9	12.8	12.2	13.6	61.4	
The focus on the TAKS inhibits students' ability to master a topic before moving on to the next topic.	20.2	21.2	19.0	39.6	o serenda sinomely ko	o teriotolia elitticia qu	camelones felelishere mt.	degadas intikleyi medada	
TAKS-focused instruction limits advanced students.	19.0	11.7	16.0	53.3	18.4	21.0	13.8	46.8	
The TAKS raises the state's educational standards and allows students to have an education that better prepares them for adult life.	43.1	25.3	17.2	14.4	36.9	15.7	13.3	34.1	
The TAKS increases the overall quality of our educational system.	47.7	28.6	12.3	11.5	15.0	13.6	12.6	58.7	
The TAKS limits the teacher's ability to tailor classroom instruction to meet the needs of your son or daughter in the classroom.	na seroom am a mal ances stra cading te	una unai	ecci walk sy more t ye, and 'i	trongly agreements car a college desp	12.8	14.0	15.9	57.3	
Because of the emphasis placed on the TAKS and preparation for the tests, learning is no longer fun.					17.1	15.3	13.7	54.0	
Standardized testing is useful when diagnosing a problem or trying to determine if a student has learned what their teacher has tried to teach them.	students l najority e	9.0	wing state d to becc	th the foll TAKS tes	11.5	16.6	19.2	52.7	

Findings

Approximately 65% of both teachers and parents agreed or strongly agreed that they expected the dropout rate to increase because of the use of TAKS as a factor in determining graduation eligibility. Almost 30% of teachers and parents completely agreed with the statement. A greater percentage of teachers and parents in low-performing districts and districts with higher dropout rates strongly agreed with the statement than did teachers in other districts. In addition, a greater percentage of parents in low-performing districts (54%) and low-income parents strongly agreed with the statement (60%) than did parents in high-performing districts (38%) and high-income parents (33%).

Perhaps because of teachers' and parents' perceptions about the potential negative impact of TAKS on students, the majority of teachers (74%) and parents (71%) agreed or strongly agreed that "the TAKS test is best suited as a diagnostic tool rather than the deciding factor for students to advance or graduate." Alternatively, only 13% of teachers and 30% of parents strongly disagreed with the statement.

Interestingly, only 37% of teachers agreed or strongly agreed that TAKS forces students to take education seriously, whereas about 52% of parents agreed or strongly agreed with the statement. More specifically, about twice as many parents (41%) as teachers (21%) strongly agreed with the statement. Although one would surmise that high school students should be more motivated by the TAKS than students at the other grade levels, there was no difference in the percentage of high school, middle school, and elementary school teachers agreeing with this statement. With respect to parents, 50–60% of parents earning less than \$30,000 per year, parents with a high school diploma or lower, and Hispanic and African American parents strongly agreed with the statement, whereas only about 25% of parents earning more than \$75,000 per year, parents with at least a college degree, and White parents agreed with the statement.

About 58% of teachers and parents agreed or strongly agreed that the "no-pass/no-play" regulation associated with TAKS testing is unfair to students who are not college-bound. About 24% of teachers and 30% of parents strongly disagreed with the statement.

A majority of teachers (69%) agreed with the following statement: "Students who score poorly on the TAKS tend to become

disillusioned and less motivated in their efforts to learn." More specifically, about 17% of teachers agreed with the statement, and another 51% strongly agreed with the statement. Elementary (61%) and middle school (58%) teachers were more likely to strongly agree with the statement than were high school teachers (43%).

Finally, approximately 70% of teachers agreed or strongly agreed that the number of practice tests given in preparation for the TAKS causes the students not to take the practice tests seriously. More than one-half of the teachers strongly agreed with the statement. A greater percentage of teachers in lowperforming districts (62%) strongly agreed with the statement than did teachers in high-performing districts (42%). Not surprisingly, a greater percentage of teachers who reported more than 10 days of TAKS preparation (64%) strongly agreed with the statement than teachers reporting 1-5 days of TAKS preparation (48%). Because teachers in predominantly minority districts reported spending a greater percentage of time on TAKS preparation, one would suspect that teachers in predominantly minority districts would be more likely to agree with the statement. Indeed, 65% of teachers in districts with greater than 75% minority students strongly agreed with the statement, whereas only 43% of teachers in districts with 25% or fewer minority students strongly agreed with the statement.

Conclusion/Discussion

The underlying rationale of high-stakes testing aligned with curricular standards is to motivate teachers to teach the curricular standards and to motivate students to engage in the learning process so that they will master the curriculum. However, less than a majority of teachers and parents believe that the TAKS forces students to take education seriously. In their study of Texas reading teachers, Hoffman et al. (2001) reported that a majority of teachers agreed that the TAAS did not motivate students to learn. In fact, when the Likert scale responses are divided into only two groups—disagree or agree—an overwhelming majority of teachers (63%) in this survey agreed that the TAKS does not motivate students to take education seriously. Related to this statement, a majority of teachers agreed that "students who score poorly on the

TAKS tend to become disillusioned and less motivated in their efforts to learn." Thus, teachers do not view the TAKS as having a positive motivating effect on students.

One of the fears of many critics of high-stakes testing is that the use of test scores in determining grade promotion or graduation will increase the dropout rate. About 50% of teachers and almost 50% of parents agreed that using the TAKS in such a way would increase the dropout rate. Indeed, several studies have concluded that high-stakes tests are associated with an increase in students dropping out of school as well as grade retention (Haney, 2000; Reardon, 1996; Vasquez-Heilig, 2006). In fact, in his study of a large urban district in Texas, Vasquez-Heilig found that the district intentionally created policies to retain students in Grade 9 so that they would not have to take the Grade 10 Exit TAAS. This resulted in a graduation rate of less than 50% over a 4-year period. Some studies, however, have found that high-stakes testing is not associated with student dropout rates (Carnoy, Loeb, & Smith, 2001).

A majority of teachers (58%) and parents (59%) did agree that that the TAKS is best suited as a diagnostic tool rather than as a tool to determine grade promotion or graduation. Interestingly, Abrams et al. (2003) found that approximately 59% of teachers in high-stakes states from across the nation agreed that test scores should not be used to determine grade promotion or retention of students.

Finally, a majority of teachers agreed that the number of practice tests given in preparation for the TAKS causes the students not to take the practice tests seriously. Further, the more time spent on TAKS preparation, the greater the percentage of teachers agreeing to this statement. This statement has profound implications for districts using benchmark tests administered in the fall and the TAKS tests in the spring to assess the impact of individual teachers on student performance. In order to have an accurate value-added score, students must be motivated to achieve on both the pre- and post-tests. Otherwise, the student gains will be inflated.

Table 3 *Teacher and Parent Perceptions of the Impact of TAKS on Students*

	Teach	ner level	of agree	ment	Parent level of agreemen			
Statement	Strongly disagree	Disagree	Agree	Strongly agree	Strongly disagree	Disagree	Agree	Strongly agree
With the TAKS being the deciding factor for students to advance or graduate, I expect the dropout rate to increase.	19.1	15.2	16.2	49.6	19.3	17.4	16.4	46.9
The TAKS test is best suited as a diagnostic tool rather than the deciding factor for students to advance or graduate.	13.1	12.7	16.5	57.7	15.0	13.6	12.6	58.7
The TAKS forces students to take education seriously.	38.6	24.4	16.2	20.8	32.5	16.0	10.4	41.1
Students who score poorly on the TAKS tend to become disillusioned and less motivated in their efforts to learn.	12.7	18.5	17.3	51.4				
The number of practice tests given in preparation for the TAKS causes the students not to take the practice tests seriously.	14.5	15.3	15.7	54.6			44	
The no-pass/no-promotion or graduation policy tied to the TAKS is unfair to those students who are not college bound.	23.7	17.7	13.5	45.1	30.1	12.4	12.0	45.4

THE IMPACT OF TAKS ON THE CURRICULUM

Findings

Many critics of testing and accountability programs have argued that such programs narrow the curriculum in two ways: Teachers focus on the subjects assessed by the high-stakes test and reduce or eliminate time spent on subjects not assessed by the test, and teachers focus on a narrow set of curricular items that are the focus of the test rather than a broader set of curriculum items included in the curriculum for each subject.

A large majority of teachers and parents (80%) agreed or strongly agreed that the TAKS in fact did force teachers to narrow the curriculum by discarding topics that they otherwise would have covered if the TAKS were not in place. About 40% of teachers and 50% of parents completely agreed with the statement. A greater percentage of White parents (75%) than Hispanic parents (62%) strongly agreed that this occurred, although the vast majority of both sets of parents strongly agreed that TAKS forced teachers to narrow the curriculum.

More than 70% of both teachers and parents agreed or strongly agreed with the following statement: "Teaching to the test is different from teaching the curriculum." A greater percentage of teachers in average-performing districts (66%) than in high-performing districts (51%) strongly agreed with the statement. A greater percentage of non-White teachers (68%) than White teachers (57%) strongly agreed with the statement. Similarly, a greater percentage of White parents (71%) than Hispanic parents (56%) strongly agreed that teaching to the test is different from teaching the curriculum.

Some people, however, argue that teaching to the test is beneficial, because doing so ensures students are exposed to the curriculum to be tested (Mathews, 2006). However, only about 9% of teachers strongly agreed that "teaching to the test was good because it focuses on what students need to learn," and 55% strongly disagreed with the statement. Of course, how one defines "teaching to the test" clearly makes a difference when determining whether teaching to the test is "good."

Almost 60% of teachers agreed or strongly agreed that the TEKS would largely be the same, even without any TAKS or state-mandated testing program. Given that states typically have curriculum frameworks with or without testing programs, it is somewhat surprising that a greater percentage of teachers did not agree with this statement.

Ideally, if the relationship between the tests and the curriculum is constructed properly, teaching students the broader curriculum should be sufficient to prepare students for success on the tests. Despite how experts describe the ideal interaction of items tested and the larger curriculum, only about 60% of teachers agreed or strongly agreed that teaching the TEKS is adequate preparation for the TAKS. A greater percentage of non-White teachers (52%) than White teachers (39%) strongly agreed with the statement. If the TAKS was actually a subset of the curriculum as argued by TEA (2005), one would expect the percentage agreeing or strongly agreeing with this statement to be much greater.

Teachers were also asked to describe how teaching to the test and teaching the curriculum are different. Teachers could provide as many answers as they wanted; thus, the percentages discussed below may exceed 100%.

As shown in Table 5 (p. 24), more than 25% of teachers responded that teaching to the test is different than teaching to the curriculum because topics or content are excluded when teaching to the test. In other words, teaching to the test narrows the curriculum. Some examples of these responses are provided below:

"The test doesn't contain the entire course syllabus. If you teach to the test there may be nuances of material that do not get covered. Teaching to the test is shortsighted because the students don't get the full experience of the subject matter."

"[When teaching to the test], you can't do the depth and complexity that you would like to and you don't have time to study the concepts because you are required to follow the proper curriculum for the test. You don't have time to study important subjects, and you can only skim the surfaces."

An almost equal percentage believed that the difference was that teaching to the test included teaching students specific testtaking strategies, whereas teaching the curriculum did not. Some examples of these responses are provided below:

"Instead of teaching the things we need to teach, we're teaching them how to take a test."

"[When teaching to the test], you teach them strategies just to answer the question correctly as opposed to teaching the actual concept."

About 10% of teachers said that the difference to them was that teachers and students could be creative or have fun when teaching the curriculum but could not do so when teaching to the test. Some examples of these responses are provided below:

"[When teaching] to the test, you are missing the creativity and not meeting individual needs."

"[Teaching to the test] limits your creativity in the ways you can teach and therefore holds back the teacher and the student."

Finally, almost 7% of teachers said that the difference between teaching the curriculum and teaching to the test is that teaching to the test excludes higher-order or critical-thinking skills:

"[Teaching to] the test is teaching specific vocabulary and concepts, whereas teaching the curriculum involves realworld projects and more critical thinking skills."

"[When teaching to the test], you have to teach them how to take a test rather than teaching how to think critically. Students are not learning to think outside the box."

Conclusion/Discussion

One of the most consistent findings in the research literature on high-stakes testing is that such testing programs narrow the curriculum in multiple ways. First, teachers focus far more of their instructional time on the subjects being tested. Second, teachers discard curricular areas that they believe will not be covered on the tests. The most definitive conclusion from this survey is that the majority of both teachers and parents believe the TAKS leads to a narrowing of the curriculum. This finding is similar to Hoffman et al.'s (2001) finding that Texas reading teachers believed that the TAAS narrowed the curriculum. Likewise, in their study of Florida, B. D. Jones and Egley (2004) found that the statemandated test narrowed the curriculum in such a way that topics

teachers considered necessary to a well-rounded education were *not* taught to students in order to increase test scores.

Another common finding is that the pressure to improve test scores, especially under high-stakes testing systems, often results in teachers preparing students to pass the test rather than focusing on teaching students the broader curriculum (Abrams et al., 2003). In other words, the pressure to increase student scores results in teaching to the test. Teaching to the test is different than narrowing the curriculum; teaching to the test involves not only focusing narrowly on those curricular objectives thought to be on the test but also adding test preparation activities to the curriculum (Abrams et al., 2003). Teaching to the test, thus, is different than teaching the TEKS (the state-mandated curriculum). Approximately 60% of the teachers believed that, in fact, teaching to the test was different than teaching to the curriculum. In some cases, teaching to the test is actually beneficial if the result is to focus teachers on the state curriculum. However, less than 10% of teachers thought teaching to the test was good, and 55% disagreed that it was good. One of the severe consequences of teaching to the test is that it causes "test pollution." In other words, when teachers spend too much time on test preparation activities, such as teaching students how to eliminate incorrect answers without knowing the underlying concept upon which the question is based, the resulting scores are invalid (Abrams et al., 2003; Koretz, Linn, Dunbar, & Shepard, 1991; Linn, 2000; Madaus, 1988). This is one possible reason why the gains on the TAAS did not correlate well with gains on the NAEP or other tests of student achievement.

Part of the problem, as suggested by B. D. Jones and Egley (2004), is that the use of narrowing of the curriculum and teaching to the test as mechanisms to increase test scores becomes an evolutionary process, in which teachers who focus solely on improving test scores rather than on the whole child are rewarded, while teachers who attempt to teach the broader curriculum and spend more time on critical thinking skills at the expense of test preparation are not rewarded. Thus, over time, the incentives are such that teachers may have to choose between what they believe is best for students (focusing on the broader curriculum and on critical thinking) and their reward (increasing test scores by using test preparation and narrowing the curriculum).

Finally, from their nationwide survey of teachers, Abrams et al. (2003) found that a majority of teachers believed that teaching the broader curriculum adequately would prepare students to pass the state tests. This was more than 10 percentage points greater than

the results for Texas teachers in this survey. However, when the Likert responses for teachers were forced into only two categories—disagree or agree—60% of teachers agreed that teaching the TEKS to students is adequate preparation for the TAKS.

Table 4
Teacher and Parent Perceptions of the Impact of TAKS on the Curriculum

	Teacl	Teacher level of agreement				Parent level of agreement					
Statement	Strongly disagree	Disagree	Agree	Strongly agree	Strongly disagree	Disagree	Agree	Strongly agree			
Teachers are forced to discard other topics they had planned to cover in class to spend more time preparing students to take the TAKS.	11.3	9.1	14.7	65.0	9.1	10.6	11.6	68.7			
Teaching to the test is different from teaching the curriculum.	13.1	14.5	12.9	59.6	12.2	11.6	13.2	62.9			
Teaching to the test is good because it focuses on what students need to learn.	55.3	23.6	12.4	8.6		d that the	all years				
The majority of the current curriculum would be the same even without the state-mandated standardized testing/TAKS.	25.2	16.3	15.9	42.7							
Teaching the TEKS for the grade and subject is adequate preparation for the TAKS.	20.5	19.3	17.9	42.3							

 Most Frequent Responses Describing the Difference Between Teaching to the Test and Teaching to the Curriculum

Teaching to the test	#	%
Excludes topics	133	26.6%
Focuses on test-taking strategies	117	23.4%
Limits teacher creativity or joy of teaching	50	10.0%
Excludes higher-order thinking skills	33	6.6%

Findings

A very large percentage of teachers (83.9%) strongly disagreed that a "teacher's salary should be influenced by his/her students' TAKS scores." Only about 9% of teachers agreed or strongly agreed with the statement. Although a greater percentage of non-White teachers than White teachers agreed with the statement, the percentage that agreed with the statement was less than 10% for both groups of teachers. Interestingly, none of the teachers in schools with 25% or less economically disadvantaged student populations strongly agreed with the statement.

Parents appeared to be more supportive of this idea. A greater percentage of parents (24%) than teachers (9%) agreed or strongly agreed with the statement. However, an overwhelming majority (76%) of parents disagreed or strongly disagreed with the statement. A greater percentage of parents in low-performing districts, low-income parents, parents with a high school diploma or lower, and African American and Hispanic parents strongly agreed that a teacher's salary should be influenced by students' TAKS scores than did parents in high-performing districts, high-income parents, parents with at least a college degree, and White parents. However, in no instance did a majority of a subgroup of parents agree or strongly agree with the statement.

Almost 70% of teachers agreed or strongly agreed that teachers have little opportunity to teach in creative ways because of the time and emphasis spent on TAKS preparation. A greater percentage of teachers in low-performing districts (54%) than teachers in high-performing districts (42%) strongly agreed with this statement. Further, the percentage of non-White teachers (61%) who strongly agreed to the statement was almost 20 percentage points greater than the percentage of White teachers (43%) who strongly agreed with the statement. Finally, a greater percentage of female (50%) than male teachers (38%) strongly agreed with the statement.

Teachers had mixed perceptions about whether teaching was still fun under the TAKS system; about 50% agreed or strongly agreed that teaching was no longer fun, and about 50% disagreed or strongly disagreed with the statement. A greater percentage of teachers in low-performing districts (42%) and non-White teachers (45%) strongly agreed with this statement than did teachers in high-performing districts (28%) and White teachers (32%). Finally, a greater percentage of older teachers and more experienced teachers strongly agreed with the statement as compared to

younger and more inexperienced teachers.

A greater percentage of parents agreed or strongly agreed (60%) than disagreed or strongly disagreed (40%) with the statement: "The TAKS requires classroom teachers to improve their teaching because they are accountable to their school district." Interestingly, a greater percentage of parents in low-performing districts, low-income parents, parents with a high school diploma or lower, and African American and Hispanic parents strongly agreed that the TAKS requires classroom teachers to improve their teaching because they are accountable to their school district than did parents in high-performing districts, high-income parents, parents with at least a college degree, and White parents, respectively. All of these differences were about 20 percentage points or greater, with at least 50% of the first groups of parents strongly agreeing to the statement and 33% or less of the second group of parents strongly agreeing to the statement. See Table 6 (p. 26).

Conclusion/Discussion

In their study of teachers across the nation, Abrams et al. (2003) found that 82% of teachers in states with high-stakes testing believed that the use of test scores to evaluate teachers was inappropriate, and 87% of such teachers were opposed to linking bonuses to the student achievement of teachers. The most important result from this section of the survey is that both teachers and parents overwhelmingly disagree that a student's score on the TAKS should influence a teacher's salary. Before the implementation of the TAKS, Hoffmann et al. (2001) found that Texas reading teachers also disagreed that TAAS scores were a good measure of teacher effectiveness.

Teachers' perceptions about the accuracy of TAKS scores reflecting a teacher's effectiveness appear to have merit. First, as Popham (1999) noted, too many people "ascribe far too much precision and accuracy to students' scores on standardized achievement tests" (p. 10). In fact, the TEA (2005, p. 6) supports this very conclusion:

Unlike TAAS, TAKS has no vertical scale score system, no Texas Learning Index (TLI), and no measure of student-level growth from grade to grade. The Texas Growth Index (TGI) provides a measure of growth; however, the growth is only intended for interpretation at aggregate educational units, such as campuses or districts. The TGI is calculated at the student level, but the reliability of the student-level growth is not strong enough for interpretation at the student level.

Further, the TEA (2005) cautioned, "The TGI was not designed to compare the growth of different classrooms within a school and therefore should not be used to evaluate teachers" (p. 1). Thus, the technical digest from TEA actually states that student scores—either as raw scores, scale scores, or TGI scores—should not be used to evaluate gains in achievement except at the school level or above. Although some statistical methodologies may be employed to partially correct for this problem, such techniques cannot account for the lack of vertical scaling in the tests.

Additionally, the TEA (2005) noted that the TAKS does not provide particularly accurate information about the gains for students scoring at the low or high end of the distribution. Thus,

teachers with a large percentage of low- or high-achieving students would tend to show either large increases or slight decreases, respectively, regardless of the true effectiveness of the teacher.

Nearly 50% of teachers thought that the TAKS restricted their opportunity to teach in a creative manner, and 35% agreed that teaching was no longer fun because of the TAKS. Hoffman et al. (2001) found that teachers in Texas believed the TAAS testing and accountability system actually pushed many high-quality teachers out of the profession or into grades or subjects that were not tested. Indeed, 85% of the surveyed teachers agreed that some of the best teachers are leaving the field because of TAAS. This may be one of the reasons that I have found in my own research that Texas teachers scoring in the top 10% of all test-takers on the pedagogy certification examinations are more likely to quit the profession than other teachers (Fuller, 2005, 2006).

Table 6
Teacher and Parent Perceptions of the Impact of TAKS on Teachers and Teaching

	Teach	Teacher level of agreement Parent level o						of agreement		
Statement	Strongly disagree	Disagree	Agree	Strongly agree	Strongly disagree	Disagree	Agree	Strongly agree		
A teacher's salary should be influenced by his/her students' TAKS scores.	83.9	7.6	3.8	4.6	64.3	12.0	7.0	16.7		
Teachers have very little opportunity to teach in creative ways because of the emphasis on and time spent preparing students for the TAKS.	19.5	13.9	19.3	47.4			η			
Because of the emphasis placed on the TAKS and preparation for the tests, teaching is no longer fun.	26.1	22.6	16.6	34.7	rode nave Juddices Juddices Juddices Executes	of percent MESolyans was no to watty din	cies ban e Federali gardones congocile	orioadi su rifidis sui beerg		
The TAKS requires classroom teachers to improve their teaching because they are accountable to their school district.					24.5	16.0	15.6	43.9		

THE IMPACT OF TAKS ON PRESSURE TO PERFORM

Findings

The theory behind Texas' high-stakes testing program is that the increased accountability will pressure teachers to focus on the state-mandated curriculum as well as on the learning of all children (Achieve Inc., 2002). About 75% of teachers agreed or strongly agreed that they felt pressure from either campus or district administrators to increase TAKS scores. In both cases, the percentage of teachers strongly agreeing was about 60%. A greater percentage of teachers from low-performing districts (68%) than teachers from high-performing districts (55%) strongly agreed that they felt pressure from campus administrators. With respect to administrators cheating or considering cheating, a greater percentage of teachers from low-performing districts (32%) than from high-performing districts (17%) strongly agreed with the statement. About 3 times the percentage of teachers from highpoverty schools (31%) than teachers in low-poverty schools (11%) strongly agreed with the statement.

Almost 66% of teachers and 60% of parents agreed or strongly agreed with the following statement: "TAKS puts so much pressure on students that it may cause some students to cheat or consider cheating." Almost 50% of respondents from both groups strongly agreed with the statement. A greater percentage of parents in low-performing districts (56%), low-income parents (57%), and parents with a high school diploma or less strongly agreed (56%) with the statement than did parents in high-performing districts (37%), high-income parents (35%), and parents with at least a college degree (39%).

A far lower percentage of teachers thought that the pressure would cause teachers to cheat or consider cheating. Specifically, only about 37% of teachers agreed or strongly agreed that the TAKS pressure would cause teachers to cheat or consider cheating, whereas twice that percentage disagreed with the statement.

Slightly more than 50% of the teachers strongly disagreed that they felt pressure from parents to increase TAKS scores. This was almost 4 times greater than the percentage strongly agreeing with the statement. Twice the percentage of teachers spending more

than 10 days on TAKS preparation (20%) than teachers spending 1–5 days on TAKS preparation (10%) strongly agreed that they felt pressure from parents to increase TAKS scores. Similarly, twice the percentage of non-White teachers (24%) than White teachers (12%) strongly agreed with the statement.

Almost 4 times as many parents strongly agreed (62%) than disagreed (16%) that their child felt pressure from her or his teacher to do well on the TAKS. Overall, 70% of parents agreed or strongly agreed to the statement. Finally, parents were split evenly in term of agreeing or disagreeing with the following statements:

- I feel anxiety when my son/daughter is required to take the TAKS.
- The TAKS has a negative emotional impact on my son/ daughter.

Not surprisingly, almost 85% of parents with children who had to retake the TAKS strongly agreed that their child felt pressure from her or his teacher to do well on TAKS. This was greater than the 57% of parents with children who did not have to retake the TAKS. Parents of elementary students (66%) were more likely than other parents to strongly agree with the statement (56%).

In addition, a greater percentage of parents in low-performing districts (47%) than in high-performing districts (34%) strongly agreed that they felt anxiety when their child was required to take the TAKS. Not surprisingly, a greater percentage of parents with children who have had to retake the TAKS (63%) than parents with children who have not had to retake the TAKS (38%) strongly agreed that they were anxious when their children took the TAKS.

Finally, and not surprisingly, a greater percentage of parents with children who have had to retake the TAKS (59%) than parents with children who have not had to retake the TAKS (36%) strongly agreed with the statement: "The TAKS has a negative emotional impact on my son/daughter." See Table 7 (p. 29).

Conclusion/Discussion

As intended by policymakers, teachers feel pressure to increase student achievement on the TAKS. However, as Halydyna, Nolen, and Haas (1991) noted, the greater the pressure to increase test scores, the greater the frequency with which unethical testing practices would increase. Indeed, almost 50% of teachers and parents agreed that the TAKS puts so much pressure on students that it may cause some to cheat or consider cheating. In addition, more than 20% of teachers agreed that the TAKS puts so much pressure on teachers and administrators that it may cause some of them to cheat or consider cheating. The large number of instances of suspicious scores on the TAKS found by Caveon-while certainly not clear evidence of cheating-suggests that the pressure of TAKS may cause some students, teachers, and administrators to cheat. This pressure to cheat is exacerbated when schools and teachers are not provided with adequate resources to meet the standards set by the state (Halydyna et al., 1991). Thus, it is not surprising that teachers in low-performing districts and districts serving large proportions of economically disadvantaged students were more likely to agree that students, teachers, and administrators considered cheating or actually cheated on the TAKS.

Finally, a majority of parents agreed that their children felt pressure to perform well on the TAKS, and about 40% of parents agreed that the TAKS had a negative emotional impact on their children. The responses of parents to the open-ended question about suggested changes to the Texas education system indicated that this pressure is fairly severe. In their study of Texas teachers, Hoffman et al. (2001) found that the TAAS has negative effects on elementary students, such as headaches, upset stomachs, and other physical effects. Further, they noted that students became more irritable, aggressive, and anxious on testing days. Likewise, Abrams et al. (2003) found that teachers from states using highstakes tests from around the country agreed that such testing caused "increased levels of anxiety, stress, and fatigue [that] are often seen among students participating in high-stakes testing programs" (p. 20). A number of researchers have found that student anxiety such as that experienced during high-stakes testing can have negative effects on performance (Everson, Smodlaka, & Tobias, 1994). Thus, as B. D. Jones and Egley (2004) argued, "These concerns must be taken seriously and not simply be pushed aside as evidence that students and teachers need to 'work harder' and 'toughen up'" (p. 19).

Table 7Teacher and Parent Perceptions of the Impact of TAKS on Pressure to Perform

	Teacl	her level	of agree	ement	Parent level of agreement				
Statement	Strongly disagree	Disagree	Agree	Strongly agree	Strongly disagree	Disagree	Agree	Strongly	
I feel pressure from district administrators to increase TAKS test scores.	15.5	9.6	13.9	61.0	es vignos nadv zen	risel oraș PAKS soi PRASS	e ensing edi bense esi Vijac	o altition y	
I feel pressure from campus administrators to increase TAKS test scores.	16.5	7.8	15.3	60.4					
The TAKS puts so much pressure on students that it may cause some to cheat or consider cheating.	18.9	14.8	17.6	48.7	21.0	17.3	13.7	48.0	
The TAKS puts so much pressure on teachers that it may cause some to cheat or consider cheating.	46.8	16.6	14.1	22.5					
The TAKS puts so much pressure on administrators that it may cause some to cheat or consider cheating.	47.7	14.0	14.9	23.4					
I feel pressure from parents to increase TAKS test scores.	50.9	21.8	12.4	14.8					
My son/daughter feels pressure from his/her teacher to do well on the TAKS.	enge sede prikusa se Estepagna				16.6	12.8	8.9	61.7	
I feel anxiety when my son/daughter is required to take the TAKS.					36.7	13.0	7.4	42.9	
The TAKS has a negative emotional impact on my son/daughter.	ца пери	1.0	Seismet Salusana Sala balif	abjusted;	34.9	15.1	10.3	39.7	

THE IMPACT OF TAKS ON OTHER AREAS

Findings

Almost 75% of teachers disagreed or strongly disagreed that the average parent can easily understand what TAKS scores mean. Over twice the percentage of non-White teachers (26%) than White teachers (12%) strongly agreed that the average parent can easily understand what the TAKS scores mean. Interestingly, more than 60% of parents agreed or strongly agreed that they could easily understand the TAKS scores, whereas only 47% of parents agreed or strongly agreed that the average parent could understand them. Thus, more parents than teachers perceived that the average parent could understand what the TAKS scores mean.

Similar to their perceptions about TAKS performance and teachers' salaries, almost 80% of teachers strongly disagreed that TAKS scores should influence administrators' salaries, and only 6% strongly agreed with the statement. Parents were more likely to agree with the statement; about 21% of parents strongly agreed with the statement, whereas 55% strongly disagreed. A greater percentage of parents in low-performing districts, low-income parents, parents with a high school diploma or lower, and African American and Hispanic parents strongly agreed that an administrator's salary should be influenced by students' TAKS scores than did parents in high-performing districts, high-income parents, parents with at least a college degree, and White parents, respectively.

About 76% of teachers and 66% of parents agreed or strongly agreed that there are too many mandatory tests. These percentages held true across the various subpopulations of teachers and parents. About 70% of teachers reporting 10 or more TAKS preparation days strongly agreed that there are too many standardized tests, whereas about 52% of teachers reporting 1–5 TAKS preparation days strongly agreed with the statement—a difference of about 18 percentage points. A greater percentage of non-White teachers (73%) than White teachers (61%) and a greater percentage of female teachers (67%) than male teachers (56%) strongly agreed with the statement.

Almost 70% of parents agreed or strongly agreed that the TAKS should be administered at the beginning of the year and at the end of the year to diagnose improvement. Similarly, slightly more than 60% of parents agreed that the TAKS should be administered

at the beginning of the school year and should be used only as a diagnostic tool. A greater percentage of parents with a high school diploma or lower, African American and Hispanic parents, and parents with children who had retaken the TAKS strongly agreed with the statement than did parents with at least a college degree, White parents, and parents with children who had not retaken the TAKS, respectively. See Table 8.

Conclusion/Discussion

Fairly low percentages of teachers and parents agreed that the average parent can understand TAKS scores. This is not surprising, given the inherent complexity of interaction between raw scores and scale scores. Further, the confidential student reports do not mention that the scores from one year to the next are not comparable or that a student could have answered a greater percentage of questions correctly in Grade 3 mathematics than in Grade 4 mathematics, yet, because of the changing difficulty level of the test, have a greater scale score in Grade 4 than in Grade 3. These concepts are rather difficult to comprehend and are most likely out of the grasp of the majority of adults in Texas.

Clearly, a majority of both teachers and parents agreed that there are too many standardized tests. However, given that the only state-required testing is the TAKS (or the TAKS equivalent for English language learner students or students in special education), teachers and parents may be responding to tests required by the district rather than the state.

Finally, a majority of parents agreed that the TAKS should be used at the beginning of the year as a diagnostic tool or that the TAKS should be administered at the beginning and the end of the year to diagnose improvement. If parents interpreted the second statement to mean that the test scores would only be used as a diagnostic tool, then parents clearly are in favor of limiting the use of TAKS to purely diagnostic rather than accountability purposes. However, the intentions of the parents are somewhat unclear from these statements.

Table 8 *Teacher and Parent Perceptions of the Impact of TAKS on Other Areas*

	Teacher level of agreement				Parent level of agreement				
Statement	Strongly disagree	Disagree	Agree	Strongly agree	Strongly disagree	Disagree	Agree	Strongly agree	
The average parent easily can understand what the TAKS scores mean.	51.3	22.5	10.9	15.3	32.6	20.6	12.1	34.6	
l easily can understand what the TAKS scores mean.					24.5	12.4	12.7	50.4	
An administrator's salary should be influenced by his/her campus TAKS scores.	79.6	10.7	3.4	6.3	55.0	12.7	10.7	21.6	
There are too many mandatory standard- ized tests.	10.3	13.3	12.5	63.9	18.3	15.5	9.3	56.9	
The TAKS should be administered at the beginning of the year and at the end of the year to diagnose improvement.	cias sin	2000 2000 2000 2000 2000	and long		19.4	11.4	12.6	56.7	
The TAKS should be administered at the beginning of the school year and only used as a diagnostic tool.					24.0	13.9	10.7	51.3	

SUGGESTIONS FOR CHANGING THE TAKS

Findings

As shown in Table 9, both teachers and parents were given a choice of five options to communicate how they would alter the TAKS. The level of agreement between teachers and parents was remarkably similar. A very low percentage of both teachers (3%) and parents (7%) suggested no changes, whereas almost 50% of both teachers and parents suggested replacing TAKS with an end-of-course examination system. A slightly greater percentage of teachers (46%) than parents (41%) suggested using TAKS or another test in combination with student GPA in making promotion or graduation decisions.

For the comparisons between groups, I collapsed the five original responses into three responses to simplify the analysis. Two responses, "Keep the TAKS as the only deciding factor" and "Replace the TAKS with a different standardized test that would be the deciding factor for students to advance or graduate," were collapsed into one response: "Use the TAKS/other test as the sole criterion for deciding student promotion/graduation." Similarly, the two responses of "Have the TAKS and student GPA be the deciding factors" and "Replace the TAKS with a different standardized test and use those scores along with a student's GPA as the deciding factors for students to advance or graduate" were collapsed into one response: "Use TAKS/other test in combination with grades to determine promotion or graduation."

There were almost no differences across subgroups of teachers in their suggestions about changing TAKS. A lower percentage of parents who had a child in one of the high-stakes grades (9%) than other parents (16%) suggested using the TAKS or another test as the sole criterion for making promotion or graduation decisions. A greater percentage of parents with a high school diploma or lower (19%) suggested using the TAKS or another test as the sole criterion for making promotion or graduation decisions than did parents with some college (9%) or an associate's degree (4%). Likewise, a greater percentage of low-income parents (18%) than high-income parents (5%) made the same suggestion. Finally, a greater percentage of Hispanic parents (18%) than White parents (6%) made this suggestion.

Conclusion/Discussion

Very few teachers or parents thought the TAKS should not be changed or that the TAKS should be replaced by another test that would be the deciding factor in promotion or graduation decisions. More than 45% of teachers and parents suggested replacing the TAKS with end-of-course exams, and an equal percentage suggested using the TAKS or another test in combination with a student's GPA to make promotion or graduation decisions.

Table 9 *Teachers' and Parents' Primary Suggested Revisions to the TAKS*

n		chers	Parents		
Suggested revisions to TAKS	#	%	#	%	
Keep the TAKS as the only deciding factor.	13	2.8%	34	6.9%	
Have the TAKS and student GPA be the deciding factors.	141	29.9%	116	23.6%	
Replace the TAKS with a different standard- ized test that would be the deciding factor for students to advance or graduate.	11	2.3%	25	5.1%	
Replace the TAKS with a different standard- ized test and use those scores along with a student's GPA as the deciding factors for students to advance or graduate.	76	16.1%	85	17.3%	
Replace the TAKS test with standardized end-of-course exams.	230	48.8%	232	47.2%	
Total	471	100.0%	492	100.0%	

Overall Discussion

The results of both the teacher and parent surveys suggest that both groups have serious concerns about how the TAKS is currently implemented and operates within the existing accountability system. This finding replicates findings in other states with high-stakes testing programs from around the country. Importantly, however, the results of this survey do not suggest that teachers or parents want to return to the days of no testing or accountability. In fact, the survey results suggest that teachers and parents do want a testing and accountability system. The problem, in their eyes, is that the current system is simply not functioning as effectively in improving learning and the quality of education for Texas children as it could be. Indeed, similar to the findings of Goldhaber and Hannaway (2004) in Florida, teachers appear to support the idea of an accountability system that holds schools, teachers, and students accountable, but they perceive that the system has swung from one extreme (no accountability) to another (extremely high-stakes accountability). Thus, teachers and parents want to keep some type of testing and accountability system in place but want to improve the current system to better meet the needs of Texas children.

In addition, nine other more specific conclusions are drawn from this study:

- 1. The TAKS does not provide an accurate assessment of a student's academic level.
- 2. The TAKS does not raise the quality of the education level for Texas children.
- 3. The TAKS has resulted in a narrowing of the curriculum.
- 4. Teachers are teaching to the test rather than to the broader curriculum.
- 5. The TAKS does not serve as a particularly effective motivator for children.
- 6. The TAKS could increase the dropout rate for students.
- 7. TAKS results should not be used to influence teachers' or administrators' salaries.
- **8.** The TAKS does result in pressure placed on teachers to increase test scores.
- **9.** The TAKS creates undue anxiety and stress on students, especially at the elementary school level.

In the current climate of focusing on results, some would argue that the survey's findings are irrelevant if student achievement is increasing. However, such an argument is flawed in several ways.

First, as noted elsewhere in the report, several studies suggest that the increases in TAAS scores were not reflected in increases on other tests, including the NAEP. This was especially true in reading, an area in which African American students in Texas made dramatic gains on the TAAS reading test but made no gains on the NAEP reading test. Such results may hold true for the TAKS as well, although there are not enough years to garner enough data to make such a conclusion.

Second, other studies suggest that Texas students did make significant progress on the NAEP during the 1990s—especially in mathematics. Studies such as those by Grissmer and Flanagan (2001) have concluded that the testing and accountability system in Texas played an important role in increasing student achievement on the NAEP. However, as Treisman and Fuller (2001) pointed out, Grissmer and Flanagan (2001) failed to include any

variables that measured the equity of state school finance systems. This is critically important, because the Texas Legislature—at the behest of the courts—created a fairly sophisticated and equitable school finance system that was implemented concomitantly with the implementation of the school accountability system. In fact, Treisman and Fuller found that the equity in school funding improved more in Texas during the years covered by Grissmer and Flanagan's (2001) study than in any other state in the nation. Because Grissmer and Flanagan omitted this crucial variable, the results of the study are inconclusive as to what policies truly drove the increase in scores in Texas. Indeed, because of the omission of such a critical variable and the lack of any variable directly identifying high-stakes testing, one could just as easily conclude from their results that the increase in Texas NAEP scores during the 1990s was due to greater funding and greater funding equity for all students.

Third, even if one assumes that the testing and accountability system in Texas has increased student achievement, the question remains whether other policy mechanisms could have increased student achievement at the same or greater rate. For example, Connecticut has been highlighted as having particularly strong NAEP reading scores and increases in reading scores. Rather than focus exclusively on a testing and accountability system, Connecticut invested quite heavily in teacher quality, development, and retention.

Policy Implications

In sum, teachers and parents believe a more effective testing and accountability system can be designed that reduces the negative aspects of the current system yet still improves student achievement. The results of this study have nine policy implications that are listed below. However, a detailed review and discussion of the policy implications are beyond the scope of this paper.

1. Invest in teacher quality rather than relying on testing, accountability, and "teacher-proof" curricula to improve student learning. In a review of the Texas education system and the transition from TAAS to TAKS, Achieve Inc. (2002) concluded that the single biggest challenge to increasing the testing standards would be the quality of the teaching force. Few would argue that the testing and accountability shed light on the fact that too many poor and minority students in Texas were receiving a substandard education. Indeed, similar to the finding by Goldhaber and Hannaway (2004) in their review of the Florida testing and accountability system, the initial results of the testing provided a wake-up call for teachers who thought their schools were serving all students well. However, testing in Texas has been around so long that this effect has likely diminished greatly.

The most important factor in increasing teacher quality is reducing the turnover of teachers—especially the most academically capable teachers. Fuller (2006) found that academically gifted teachers are more likely to leave the profession than their less academically gifted peers. This attrition of the most capable teachers is the result of many factors, including relatively low pay, adverse working conditions, and the testing and accountability system itself. A 1999 study of teacher attrition in Texas by the Association of Texas Professional Educators found that pay was the most important reason cited by teachers who left the profession (Creative Consumer Research, 1999). In addition, a growing body of literature suggests that teacher working conditions—especially school leadership—greatly impact the attrition of teachers (Center for Teaching Quality, 2004; Ingersoll, 2001). Finally, as noted previously, Hoffmann et al. (2001) found that teachers in Texas believed the TAAS testing and accountability system actually pushed many high-quality teachers out of the profession or into grades or subjects that were not tested. Indeed, 85% of the surveyed teachers agreed that some of the best teachers were leaving the field because of TAAS.

2. Increase financial investments in the overall education system. As was made clear in the latest round of school finance litigation, funding from the state ensures only a mediocre level of achievement on the TAKS. If the state truly wants to leave "no child behind," then many more dollars must be spent on the core technologies of education—teacher quality, class sizes, and special programs for the increasingly large percentage of English language learner and special needs students.

- 3. Adopt a statewide, standardized end-of-the course examination at the high school level and explore the adoption of end-of-the course examinations at the middle school level. Although not conclusive, the survey results suggest support from both parents and teachers for this idea. Such examinations make sense at the secondary level, where courses are taught separately and each subsequent grade level has different instructional domains. The adoption of end-of-course tests makes even more sense in light of the fact that there is already no vertical scaling between grade levels. Proper implementation would need to include an end-of-course examination for each of the main courses in each of the four core subject areas (English language arts, mathematics, science, and social studies). Realistically, this would require a minimum of 16 examinations at the high school level and another eight at the middle school level if implemented for the seventh and eighth grades. With respect to elementary schools, the TAKS already serves as an end-of-course test. However, as suggested below, the relationship between the test content and the curriculum needs to be reviewed carefully.
- 4. Revise the TEKS to provide clearer descriptions of what should be taught as well as reduce the number of curricular topics included for each subject at each grade level. Reducing the number of topics should not be seen as lowering standards. Recent research and policy papers have critiqued the U.S. curriculum as being "a mile wide and an inch deep" (National Center for Education Statistics, 1996; National Commission on Mathematics and Science Teaching for the 21st Century, 2000; Schmidt, McKnight, & Raizen, 1997). Thus, the TEKS should be revised to focus on only the core concepts central to the understanding of each subject area. In this way, students and teachers could engage more deeply with the curriculum while still preparing for a standardized examination.
- **5.** The state should strongly caution school districts not to use TAKS scores to make high-stakes decisions about teachers. Although the recent teacher incentive program included within House Bill 1 does not explicitly mention TAKS, much of the current discussion about teacher incentives has been focused on linking student scores to teachers in order to evaluate teachers using a value-added strategy. Districts are certainly left with the impression that using TAKS scores would be an appropriate strategy for value-added evaluations of teachers. As noted previously, the TAKS scale scores cannot be used in such a manner, and the TGI scores cannot be used in making such decisions. Thus, this information should be communicated clearly and publicly to all district leaders. If districts do use the scores in inappropriate ways, they may incorrectly identify some ineffective teachers as effective and some effective teachers as ineffective, thus undermining the entire premise of the teacher incentive program. As policymakers learned from the implementation of the career ladder program in the

1980s, they get one chance to implement such programs. If districts were to create incentive programs that are not supported by research, then the chances for adopting future teacher incentive programs would decrease markedly.

6. Change the accountability system by removing the high-stakes nature of the TAKS at the elementary school level. The results from this survey of both teachers and parents strongly suggest that the use of TAKS as a tool to determine promotion at the elementary school level is not productive for students. Indeed, a large body of research has found that retention in grade is strongly associated with the probability of a student dropping out of school.

Since 2003, students have been required to pass the TAKS reading examination in third grade in order to advance to the fourth grade (TEA, 2005). Although the percentage of third-grade students retained increased from 2.5% in 2002 to 2.9% in 2003, the percentage then dropped to 2.7% in 2004. Data from 2005 is not yet available. When the state changed the advancement and retention policies in 1999, the percentage of students retained increased from 1.8% in 1998 to 2.3% in 1999. The rate increased over time to 2.5% in 2002.

The data suggest that the previous policies adopted in 1999 were sufficient in influencing schools to retain students at fairly high rates, even without a high-stakes testing component. This is not to say that schools and districts should not be held accountable for the academic progress of their students. In fact, the state should closely monitor the progress of all students who do not pass the third-grade reading and mathematics tests and should place pressure on districts that do not.

- 7. The state should explore changing the accountability system to include both gains in achievement as well as absolute levels of achievement. Although the current system has a provision that examines required improvement if a school or district does not meet a particular standard, the state should explore creating a system in which some proportion of the rating is based on an absolute level of performance with another proportion based on student gains over time. This will communicate to teachers that both steady progress and high levels of achievement are important.
- 8. With the advent of computerized testing, explore administering the test at the beginning of the year and near the end of the year to obtain a true value-added measure of the efforts of a school. This will be extremely important if end-of-course examinations are adopted because there likely will be too little overlap in information to calculate the value-added measure of schools from one grade to the next. If the state does choose to pursue such a policy, the state needs to ensure that the financial investment from the state is sufficient to ensure a high level of quality and equity in

the program. Such efforts are likely to be initially expensive, but the results certainly could outweigh the costs.

9. In creating a new testing and accountability system, include the voices of teachers from across the state and from all subjects and school characteristics. Teachers are currently involved with the TAKS testing by serving on item review committees, but teachers should have a place at the table when the system is developed or modified. As noted previously, teachers want to have an accountability system, but they want a testing and accountability system that is more effective in creating the right incentives than the current testing and accountability system is.

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